PRELIMINARY HYDRAULIC FIELD VISIT CHECKLIST 11/4/14

1. MEASUREMENTS OF BRIDGE/CULVERT, WATERWAY, APPROACHES
   - Soundings for bridge opening, incl. bridge seats, toe of abutment, ground, TB, WE
   - Measure/locate each span
   - Measure size of culvert opening (BxH)
   - Measure skew of structure
   - Plot location of channel/TB relative to structure
   - Note abutment type and condition
   - Note any evidence of scour;
     - Scour hole at outlet (depth, length, width)
     - Is box perched? If so, measure how much.
   - Note signs of high water and elevation
   - Note bed material and condition
   - Measure elevations along approaches relative to deck elev.
   - Note any identifiable migration of stream
   - Note condition of existing bridge/box culvert (cracks, spalling, etc)
   - Measure normal depth of water, recent high water, OHW (mudline)
   - Note if flow is confined to a single barrel, if culvert is a multiple barrel.
   - Measure width of channel (base, water's edge to water's edge, top of bank to top of bank) and plot channel alignment/skew relative to structure
   - Note debris potential

2. NEARBY PROPERTY, STRUCTURES, ETC. AFFECTED
   - Note any structures upstream that may be in the floodplain
   - Note nearby utilities
   - Note potential environmentally sensitive areas (including wetlands, parks)
   - Note Right-of-Way acquisition concerns (especially for recommended alignment)
   - Measurements of building offsets, driveway location, etc. if directly adjacent to bridge/culvert
   - Obtain historical flooding info. from residents: name, address, phone no., years in residence
   - Describe floodplain characteristics upstream and downstream

3. PHOTOGRAPHICAL INFORMATION
   - Upstream channel and banks
   - Downstream channel and banks
   - Bridge face showing approaches
   - Left approach alignment
   - Right approach alignment
   - Any special conditions that warrant a photograph
   - Document photos taken in field notes for identification purposes.

4. FIELD NOTES
   - Plan view sketch at 1"=50' scale (or other convenient scale).
     Plan view sketch should include ex. structure/bents, channel alignment with WE & TB, and include road, and any pertinent adjacent features (building, drive, woods line, utilities, ditch, pipe etc.). After field visit, proposed structure should be added at appropriate skew and include preliminary span arrangement.
   - Profile view at 1"=10' scale (or other convenient scale).
     Profile view should include ex. structure/bents, WE & TB, etc. After the field visit, proposed structure should be added and include preliminary superstructure and span arrangement.
   - Record of conversation with residents in vicinity

- Show recommendation for replacement or for new structure
- Note any advantages or disadvantages with respect to various alternatives.
- Note recommendation for proposed structure/road alignment, and temp. on-site detour
- Record of photographical information

Obtained from Routine Inspection Report

- Superstructure depth (top of deck to low chord)
- Clear roadway width
- Width of bridge face to face